

TRIPTERYGION CAPITO. Jen.

PLATE XIX. fig. 1.

T. fusco-griseum, pinnis concoloribus: tentaculis palpebralis duobus parvis gracilibus e crinibus duobus vel tribus formatis; nasalibus minutis simplicibus: dorsali primâ humili sex-radiatâ, radiis subæqualibus; secundâ duplo altiore; tertiâ parum altissimâ: lineâ laterali abbreviatâ, vix ultrâ pectorales extensâ.

B. 6; D. 6—20—14; A. 25; C. 14, &c.; P. 16; V. 2.

LONG. UNC. 2. lin. 5.

FORM.—Depth at the pectorals one-sixth of the length: thickness at the same part about two-thirds of the depth. Head rather large, thicker than the body, contained four and a half times in the entire length. Snout short, the profile falling very abruptly from between the eyes. These last large, one-third the length of the head, high in the cheeks, reaching to, but hardly interrupting, the line of the profile. Above each a short slender compound tentacle: that on the right side consists of two filaments, one simple, the other forked, so as to appear like three; that on the left appears undivided. Also a minute filament at each nostril. The maxillary reaches to beneath the middle of the orbit. Jaws equal: in each a row of small conical sharp-pointed teeth, with a broad velutine band behind, the band, however, only in front. A transverse band of velutine teeth on the vomer, extending a little on to the palatines. Opercle and preopercle rounded. Branchial membrane free all round, with a shallow notch in the middle underneath.

The first dorsal commences in a vertical line with the insertions of the ventrals; the rays are six in number, and so nearly equal in length as to cause the fin to appear quite even; its height is scarcely more than one-third of the depth. The second dorsal begins a little behind the origin of the pectorals: it is also nearly even, but twice the height of the first. The third closely follows the second: this fin is uneven, but its most elevated point is somewhat higher still than the second. The rays of the first and second of these fins are spinous: those of the third soft and articulated, but all simple. The anal, which has also simple rays, commences beneath the middle of the second dorsal, and terminates in the same vertical line with the end of the third, between which last and the caudal is a small space. Caudal square, with twelve of the principal rays branched. Pectorals a little less than one-fourth of the entire length; the ninth and tenth rays longest; the six lowermost rather stouter than the others, and, as well as the three uppermost, which are very slender, simple; the fourth to the tenth, both inclusive, branched. Ventrals contained about six and a half times in the entire length; consisting of only two slender filamentous rays.

Scales minute, their free edges finely ciliated; the concealed portion of each scale marked with twelve or fourteen striae. The lateral line rises at the upper angle of the opercle, and is well marked by a row of tubular scales till it reaches a little beyond the extremity of the reclined pectoral, where it abruptly terminates, and all further trace of it is lost.

COLOUR.—(In spirits.) Of a nearly uniform dark brown, inclining to griseous, with some appearance of darker clouds or spots between the second dorsal and the lateral line; this last also is indicated by a darker streak than the ground colour. Fins dark brown: there is, however, some trace of a white edging to the anterior half of the anal, which may have been more conspicuous in the living state.

A second specimen slightly differs from the above, but is evidently referable to the same species. It is smaller; and the profile falls more gradually. The caudal has only eight branched rays, with two lateral simple ones. The pectorals have the tenth and eleventh rays longest, with the seven lowermost (instead of six) stouter than the others and simple. The fin-ray formula is also different.

D. 6—19—13; A. 25; C. 10, &c.; P. 17; V. 2.

Length 2 inc. 1 line.

The colours are paler, and more decidedly grey, with the darker mottlings more distinct. The dorsals and caudal are pale, minutely dotted with brown. Tips of all the anal rays white.

Habitat, Bay of Islands, New Zealand.

This species approaches very closely the *T. nigripenne* of Cuvier and Valenciennes, of which it may possibly be a variety; but the description in the "Histoire des Poissons," as regards the form, is limited to a very few words. If the figure given by those authors be correct, the *T. nigripenne* differs decidedly in the first dorsal being more elevated, with the rays more unequal, and in the lateral line extending the whole length of the fish. In the present species the first dorsal is low and even, with the rays all equal, and the lateral line cannot be traced much beyond the pectoral; and these characters are found in both specimens. There are also six rays in the first dorsal. According to the description, the *T. nigripenne* has but five, though six are represented in the figure.

From the *T. varium*, this species differs not only in its fin-ray formula, but in its markings: and the same characters serve to separate it still more widely from *T. Forsteri* and *T. fenestratum*.

This species was obtained by Mr. Darwin on tidal rocks in the Bay of Islands, New Zealand. Three out of the only four extra-european species described by Cuvier and Valenciennes come from the same locality.

FAMILY.—GOBIDÆ.

1. GOBIUS LINEATUS. Jen.

PLATE XIX. fig. 2.

G. nigro-griseus, lineis circiter decem longitudinalibus nigris: capite lato, subdepresso; genis inflatis: maxillis æqualibus: dentibus velutinis, externis fortioribus aculeiformibus; caninis nullis: oculis amplis, intervallo vix plus quam semidiametrum æquante: pinnis dorsalibus contiguis, altitudine subæqualibus; pectoralibus radiis supernis setaceis, liberis; caudali rotundatâ: squamis mediocribus, levissimè ciliatis.

B. 5; D. 6—1/9; A. 1/8; C. 13, &c.; P. 7 et 16; V. 1/5.

LONG. UNC. 4. lin. 8.